

CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM INTENSITY FLASHING WHITE SYSTEMS

80. PURPOSE.

This dual lighting system includes red lights (L-864) for nighttime and medium intensity flashing white lights (L-865) for daytime and twilight use. This lighting system may be used in lieu of operating a medium intensity flashing white lighting system at night. There may be some populated areas where the use of medium intensity at night may cause significant environmental concerns. The use of the dual lighting system should reduce/mitigate those concerns.

81. INSTALLATION.

The light units should be installed as specified in the appropriate portions of CHAPTER 4. , CHAPTER 5. , and CHAPTER 6. The number of light levels needed may be obtained from APPENDIX 1.

82. OPERATION.

Lighting systems should be operated as specified in CHAPTER 4. , CHAPTER 5. , and CHAPTER 6. as appropriate. Both systems should not be operated at the same time; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of one of two lamps in the uppermost red beacon (L-864 incandescent unit) or outage of any uppermost red strobe shall cause the white obstruction light system to operate in its specified "night" step intensity. ,

83. CONTROL DEVICE.

The light system is controlled by a device that changes the system when the ambient light changes. The system should automatically change steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

a. *Twilight-to-Night.* This should not occur before the illumination drops below 5 footcandles (53.8 lux) but should occur before it drops below 2 footcandles (21.5 lux).

b. *Night-to-Day.* The intensity changes listed in a. above should be reversed when changing from the night to day mode.

84. ANTENNA OR SIMILAR APPURTENANCE LIGHT.

When a structure utilizing this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white and a red flashing beacon should be placed within 40 feet (12m) from the tip of the appurtenance. The white light should operate during daytime and twilight and the red light during nighttime. These lights should flash simultaneously with the rest of the lighting system.

85. OMISSION OF MARKING.

When medium intensity white lights are operated on structures 500 feet (153m) AGL or less during daytime and twilight, other methods of marking may be omitted.